

The Public Wet Market System of Iloilo City, Philippines

JOSHUA CEDRIC I. CARMEN¹, EDEL FRANCIS T. LIMA²,
JOSEPH JOSHUA U. TE³, AUSTINN NATHANIEL T. TOLEDO⁴,
and CHRISTINE MAE D. HERNANDO^{5*}

ABSTRACT. In the Philippines, public wet markets are an integral part of the country's history, culture, and economy. Wet markets are the primary trading centers in towns all over the Philippines since the Spanish colonial times. However, with globalization, the increasing hypermarketization in Iloilo City threatens the viability of wet markets. This paper sought to find out the external environment, resources, enterprise components, and business outputs of the wet markets in Iloilo City. It also explored various local governance initiatives to assist the business growth and development of these wet markets. Using a descriptive design and interviews with 100 wet market entrepreneurs in Iloilo City, findings reveal that wet market operations are affected by external environmental forces. Majority are registered as single proprietorships with an initial capitalization of at least PhP 20,000 from the owner's personal savings and operating for more than nine years at the time of the interview. Moreover, majority of them use manual accounting system; issue receipts for transactions; do not prepare financial reports; engage in the sale of a wide variety of goods and services; and earn revenues amounting to PhP 1,000 to PhP 4,999 daily. The study suggests for an accredited apex organization of wet market vendors association in Iloilo City with representation in the city legislative council to ensure participation in local policy formulation for the growth and development of wet market enterprises.

Keywords: *Business enterprise, public wet market system, local governance*

¹Juris Doctor student, College of Law, University of the Philippines Diliman, Quezon City, Philippines, <https://orcid.org/0009-0004-4063-0717>

²Global Compliance & Reporting, SGV & Co., Metro Manila, Philippines, <https://orcid.org/0009-0000-2848-2097>

³Te Accounting Office, Iloilo City, Philippines

⁴PwC Acceleration Center, Metro Manila, Philippines

⁵College of Management, University of the Philippines Visayas, Iloilo, Philippines, <https://orcid.org/0000-0002-1744-8157>

*Corresponding author: cdhernando@up.edu.ph

INTRODUCTION

In Asia, public wet markets are considered as traditional food providers and significant sources of food and agricultural products (Zhang & Pan, 2013; Huang et al., 2015). For most Asian families, wet markets are the popular retail outlets for daily food and household goods (Bougoure & Lee, 2009; Dholakia et al., 2012). Wet markets can be construed in terms of the more generic concept of the marketplace, which is associated with the idea of people coming together (Marinelli, 2018). The Greek term for marketplace is *laike agora* with “*agora* evoking the idea of people, congregating often in a square” (Marinelli, 2018, pp. 230–231). The notion of a community of people in a public space has also dominated the concept of the marketplace (Stillerman, 2006; Shepherd, 2008). Among the Chinese, the term *sichang* refers to a market, which is a place for trade and commerce (Marinelli, 2018) and *caishichang* as wet markets, which are considered as popular food sources (Zhong et al., 2020). The term “wet” is used to describe the extensive use of water for keeping fresh the fruits and vegetables as well as seafood, and washing excess water and other wastes from the street (Yan, 2013; Sharif et al., 2015).

In the Philippines, wet markets are commonly known as *palengke* among the Tagalogs and *tienda* or *mercado* for the Ilonggos. These have been the primary trading and commercial centers in towns all over the country since the Spanish colonial times. *Palengke* is from the Spanish word, *palenque*, which means an area enclosed by a wooden structure for public festivals or other purposes (Royal Spanish Academy, 2001). *Tienda* and *mercado* are also Spanish words meaning grocery store or general purpose store and public place for procurement of goods, respectively (Royal Spanish Academy, 2001). Wet markets have long been in existence even during the pre-colonial times with the barter system as the form of exchange. However, with the coming of the Spanish *conquistadores* and their imposition of their own currency and monetary system on the colony, money became the medium of exchange (Bangko Sentral ng Pilipinas, n.d.).

Wet markets play an important role in local economic development by providing a convenient facility for small-scale entrepreneurs to establish their business operations (Zhong et al., 2020). They are also public spaces that facilitate close interpersonal relationships characterized by mutual trust and reciprocity between sellers and buyers (Huang et al., 2015; Mele et al., 2015); socio-cultural venues that promote a sense of identity and feelings of belonging to a community as well as informal, social interactions and communication among people of various economic and social classes (Black, 2012; Mele et al., 2015).

However, with changing times and the spread of globalization, supermarkets and hypermarkets have emerged, posing a serious threat to the existence of the wet market industry. Supermarkets have been spreading rapidly in Asia (Gorton et al., 2009; Reardon et al., 2012). "Supermarketization," a term coined in China, indicates the emergence of Western culture in putting up huge supermarkets, which have become a concern for wet market industries in HongKong (Bougoure & Lee, 2009), China (Hingley et al., 2009), and the rest of Asia (Trappey & Lai, 1997). There is even a slack in supermarket expansion as younger consumers would show preference for new retail formats such as hypermarkets, convenience stores, and warehouse stores (Trappey & Lai, 1997). Supermarkets and hypermarkets offer cleaner and air-conditioned environments with a variety of products that allow for efficient one-stop shopping (Bougoure & Lee, 2009; Gutierrez & Jegasothy, 2010). The more comfortable and hygienic conditions of modern supermarkets assure customers of food safety practices and quality standards for food as well as non-food products sold in these stores. Moreover, for busy shoppers, getting everything they need with ease and comfort in one shopping facility provides the added advantage for supermarkets over public wet markets.

As of 2015, seven out of 10 Filipinos no longer shop in wet markets (Business Mirror, 2015). This is because supermarkets and grocery stores are often located inside air-conditioned malls and offer convenient one-stop shopping (Schipmann & Qaim, 2011). In wet markets, the safety of the consumers may be at risk as food hygiene standards are compromised (Guan et al., 2003; Webster, 2004). In spite of these, wet markets continue to thrive in the economy. Part of the reason is that there are consumers who have already established regular patronage with their sellers in the wet markets while many opt to go to the wet markets where agricultural and fishery products are usually fresh and cheap (Zhong et al., 2020).

The concern for food safety and hygiene in wet markets (Black, 2005) and consumers' preference for perceived freshness of produce sold in wet markets dominate much of the current literature on wet markets (Goldman et al., 1999; Zhong et al., 2020; Zhenzhong et al., 2019). But scant attention has been given to wet markets as part of the modernizing food retail industry (Romo et al., 2009) and much less on improving the viability of wet market operations. Hence, empirical studies on wet markets are necessary to generate scientific data as the basis for engaging government action in facilitating the business development of wet markets.

The Iloilo City wet markets have become popular segments of the local food retailing industry and at the same time, an important aspect of the socio-cultural and economic heritage of the Ilonggo community. Hence, it is important to know how the local government of Iloilo City can assist wet market businesses to survive amidst strong competition coming from the rapid development of supermarkets and hypermarkets in the City.

This paper presents the findings of a study that looked into the public wet market industry of Iloilo City. The purpose of the paper is to gain a better understanding of the wet markets as viewed through the lenses of the open systems model. Specifically, it describes the following: 1) external environment of the wet markets and how wet market entrepreneurs respond to environmental conditions; 2) resource inputs of the wet markets; 3) enterprise components of the wet markets; and 4) business outputs of the wet markets. The study also discusses the initiatives of the Iloilo City government through its Local Economic Enterprise Office (LEEO) in the management and development of the wet markets in Iloilo City.

Analytical Framework of the Study

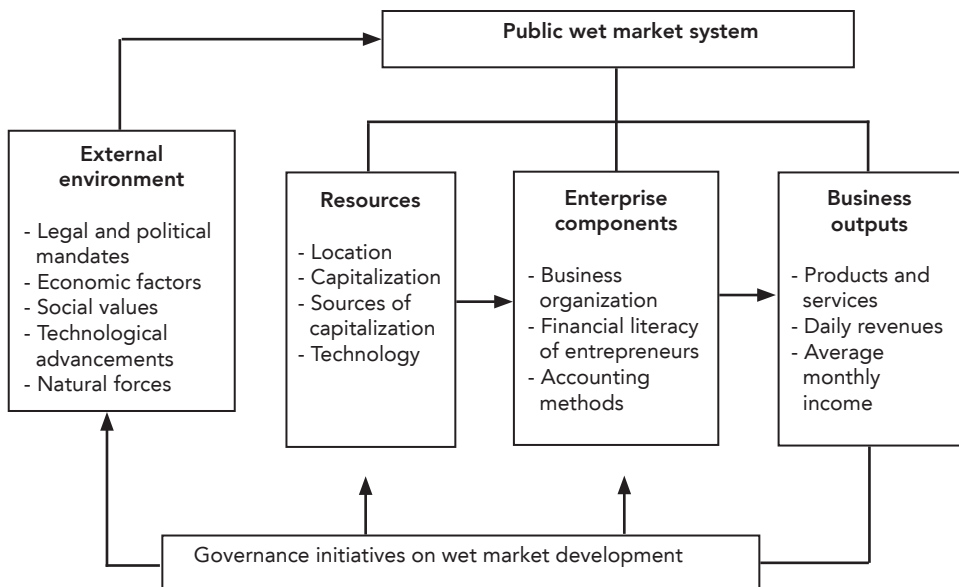
The public wet markets in the study were assessed from the open systems perspective. Significant concepts in the open systems theory are as follows: 1) a system consists of interconnected and interdependent parts or elements that make up a complex unified whole, and change in one part creates changes in other parts; 2) a system is characterized by synergy, i.e., the whole is greater than the sum of its parts and its elements are bound by a common purpose; 3) a system is boundary maintaining and its boundary separates it from the external environment; and 4) as the system interacts with its environment, it goes through the process of input, throughput, and output (Wilson, 1983). Such system processes are intended for attaining system equilibrium and adaptation for survival and growth (Meadows, 2009; Wilson, 1983).

Since the open system exists in a dynamic relationship with its environment, it derives inputs for system growth from the environment, processes or transforms them into outputs, and exports them back to the environment (Kast & Rosenzweig, 1972). There is the flow of material, information, and other resources from the external environment into the system, and their transformation through system components and processes to become tangible outputs such as goods and services (Stoner et al., 1999). There is system feedback for evaluation and control, and

through which assessments of system operations and other relevant information are relayed to the appropriate societal organizations or individuals for purposes of correction or improvement of the system (Stoner et al., 1999).

The input-transformation-output process of the open systems model is reflected in the analytical framework of the study (Figure 1). Public wet markets are regarded as open systems engaged in continuous interaction with the external environment. The external environment has political, social, economic, and technological segments that bear on the system's culture and goal accomplishment (Cummings & Worley, 2014). These segments have indicators such as legal and political mandates, economic factors, social values, technological advancements, and natural forces, which affect management decisions and business operations of the wet market enterprises.

Figure 1
Analytical framework of the study



Wet market resources include location of the business, capitalization and sources of capitalization, and technology. Enterprise components of the wet markets process and transform these resources to become business outputs. These components include the nature of business organization, length of existence of the business enterprise, financial literacy of wet market entrepreneurs, and accounting methods of the wet market enterprises.

The business outputs are the products and services that wet markets offer, as well as the daily revenues and average monthly income of the enterprises. Feedback comes in the form of initiatives in wet market management and development by the Local Economic Enterprise Office (LEEO) of Iloilo City.

METHODOLOGY

The study used a descriptive research design. Data and information were generated from among the eight wet markets in the various districts of Iloilo City specifically Iloilo City Proper, further divided into the Iloilo City Public Market (commonly known as Central Market) and the Iloilo Terminal Market (commonly known as Super Market), Molo, Mandurriao, Jaro, Arevalo, and La Paz. The study was confined to wet market stall holders in the public wet markets in Iloilo City. The population consists of roughly 991 stalls or stores consisting of about 344 stores in Iloilo City Terminal Market, 302 in Iloilo City Public Market, 11 in Molo, 42 in Mandurriao, 34 in Jaro, 60 in Arevalo, and 198 in La Paz. The Committee on Markets and Slaughterhouses of the Iloilo City government provided the list of stalls within these markets and their owners, which served as the sampling frame of the study.

The overall sample size was determined using Slovin's formula as follows:

$$n = N / (1 + N(e^2))$$

where N = population
 n = desired sample size
 e = margin of error

$$n = 991 / (1 + (991 * (10\%)^2))$$

$$n = 90.83409716$$

Sample size: 91 (round off)

The formula resulted in 91 stores as samples for the study. However, the sample size was increased to 100 in order to increase the degree of confidence. The respondents were proportionately allocated based on market population size, and chosen randomly from the official list of the Committee on Markets and Slaughterhouses. Table 1 shows the number of respondents per area.

Table 1
Number of respondents per area

Location	Population	Sample size
Iloilo Terminal Market	344	35
Iloilo City Public Market	302	30
La Paz	198	20
Arevalo	60	6
Mandurriao	42	4
Jaro	34	3
Molo	11	2
Total	991	100

A structured survey questionnaire was used in generating primary data from the respondents. Using a semi-structured interview schedule, key informant interviews were conducted with two officials from the LEEO to obtain basic information regarding the public wet markets and governance efforts of the City government in assisting the wet markets.

Before collecting data, permission to undertake the study was obtained from the respondents and the Committee on Markets and Slaughterhouses of the Iloilo City government. Secondary data were obtained from official documents of the Committee. Data were gathered from February to April 2018. Data were analyzed using descriptive statistics and thematic analysis.

RESULTS AND DISCUSSION

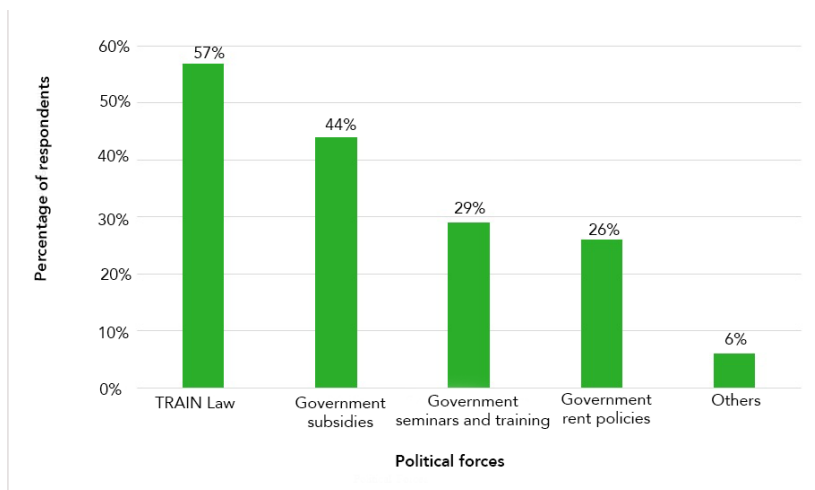
The Iloilo City public markets are local government-owned and managed economic enterprises in accordance with the Philippine Local Government Code of 1991 (Section 4, Iloilo City Market Code). The sellers in the public wet markets are classified either as stall holders or transients/ambulant vendors.

Most of the stall holders (43%) have been in business for nine years; a number of them (10%) have been in business for seven to nine years; some of the businesses (23%) have been operating for four to six years; and a few of them (24%) have been around for one to three years. Almost all of these businesses (98%) were registered at the same year when they started their operations. This is because majority of the wet market enterprises (68%) are family-owned businesses, and it has been a tradition of the families to pass on their business to their children. If the children refused to continue the business, they would lose their stalls in the wet market and have a hard time looking for reliable people who could endure the physical labor and early working hours (Yan, 2013) of operating the stalls.

All of the respondent-stall holders of the study were residents of Iloilo City. There were more male owners (53%) than female owners (47%). In terms of age, most of them (46%) belonged to the 31–40 age group; some (33%) were 20–30 years old; and others (19%) were between 41 and 50 years old. These results indicate that most of the respondents are relatively young, and must have taken over the business from their elders given that majority of the stores have been in operation for nine years already.

External Environment of the Wet Markets

Legal and political mandates. Figure 2 presents the various legal and political mandates that affect the business operations of the wet market stores in Iloilo City. Majority of the respondents (57%) believed that new government policies particularly the Tax Reform for Acceleration and Inclusion (TRAIN) Law or Republic Act No. 10963 affect taxation policies on the products sold by wet market operators around Iloilo City. Some (44%) were affected by subsidies or support coming from the government. Others (29%) considered government programs and seminars to benefit their businesses. Still others (20%) considered rental fees as affecting their businesses.

Figure 2**Political forces affecting the business of wet market stores in Iloilo City**

The regulation of the wet markets is primarily the responsibility of the local government of Iloilo City as provided in the Philippine Local Government Code of 1991 (Republic Act No. 7160) (Official Gazette, 1991). Such responsibility has been exercised mainly in the collection of taxes and rents from the use of public stalls and spaces inside the markets. Government tax policies and rules imposed on wet markets affect business decisions, e.g., choosing what products to sell, what kind of employees to employ, and most certainly how to price products and services in order to stay competitive.

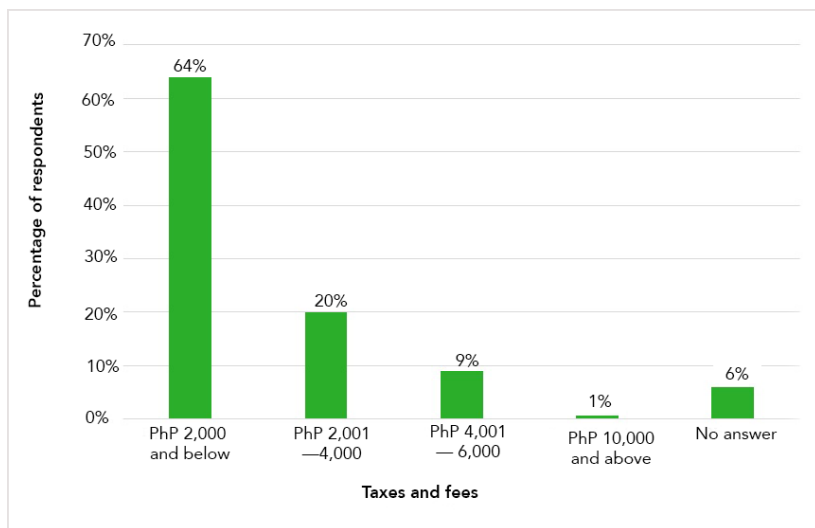
The wet market operators were also asked if they have received any support or participated in any government program to improve the effectiveness and efficiency of their business operations. While a few (29%) said that they received government subsidies and programs, majority of them (85%) said that they have not received any support from the government, and neither have they participated in any government program aimed to improve their business operations. Majority of the wet market entrepreneurs (53%) said that they were not interested in such assistance, and they considered it as a waste of time and money especially if there were registration fees involved in seminars and trainings. Only a few (13%) said that they were willing to avail of such assistance, while others (34%) said that they were not sure whether or not they would avail of such assistance.

The few who were willing to avail of government assistance believed that financial assistance for the business should be the top priority of the government, as well as the conduct of seminars or trainings on business management to improve the skills and competencies of the entrepreneurs. They also required regular government check-ups or monitoring of their operations not only for regulatory purposes, but more importantly, for identifying business needs and concerns that the local government can proactively address. While government cannot interfere on matters pertaining to running the business, they said that the latter can provide the right business environment for the wet markets by providing training programs that could further enhance their business acumen and managerial skills.

Economic factors. All of the entrepreneurs (100%) pointed to the payment of annual business permits or registration fees and taxes as the most important economic factor that affects wet market operations. Majority of them (53%) reported that they paid their registration fees to the government; some (34%) did not pay registration fees; and a few (13%) were unaware that they had to pay such fees. These results show that the majority of the wet market stall holders were fulfilling their obligations as business owners.

Figure 3 displays the amount of annual registration fees and taxes paid by the wet market stores to the Iloilo City government. For most stores, these fees only covered a small portion of their disposable income, as majority of the wet market entrepreneurs (64%) only paid fees ranging from PhP 2,000 or below. For some stores, however, these fees can be burdensome especially for those that can barely subsist with their incomes. Data show that 20% of the stores paid annual taxes and fees ranging from PhP 2,001 to PhP 4,000, while 9% paid taxes and fees ranging from PhP 4,001 to PhP 6,000. Only 1% of the wet market stores paid taxes from PhP 10,000 and above.

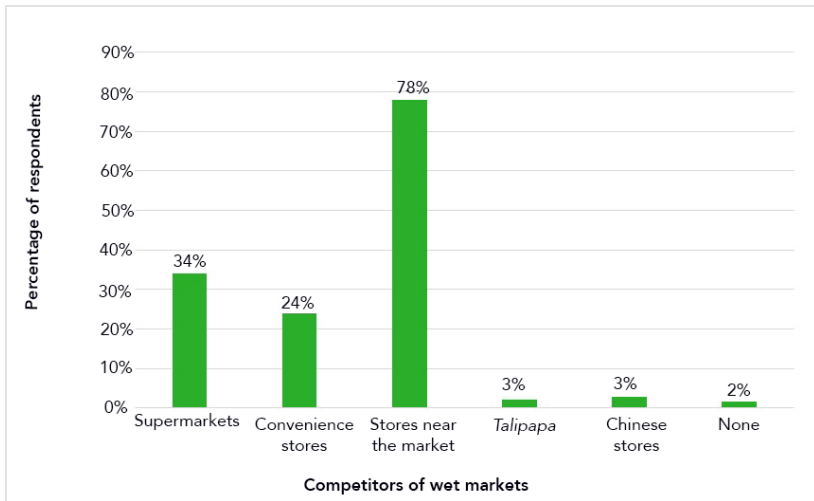
It is difficult to ascertain which size of wet market business paid which amount of taxes since wet market operators, like any businessmen, are reluctant to reveal financial data from their business operations except in compliance with government regulations. However, such information can be gleaned from the Revised Local Revenue Code of Iloilo City or the Tax Ordinance No. 2008-021, which stipulates the amount of taxes to be paid based on the annual gross income of business enterprises. Chapter II, Section 22(a) of the Tax Ordinance, states that businesses with annual gross incomes of PhP 40,000 or more but less than PhP 50,000 should pay an annual business tax of PhP 1,326.25; those with annual

Figure 3**Total amount of taxes and fees paid by wet market stores in Iloilo City**

gross incomes ranging from PhP 50,000 but not more than PhP 150,000 should pay taxes ranging from PhP 2,178 to PhP 3,630. Businesses with gross incomes of PhP 150,000 but less than PhP 300,000 are to pay taxes ranging from PhP 4,537–6,352. Those with annual incomes of at least PhP 500,000 should pay business taxes of PhP 10,000 and above (Office of Sangguniang Panlungsod-Iloilo City, 2008).

Besides taxes and registration fees, wet market stall renters have also other financial responsibilities, which include fixed expenditures such as the *arkabala*/monthly rental fees for use of the stalls or spaces in the City public markets. Tax Ordinance No. 2008-021 also provides for the rental rates based on per square meter of the space rented by the stall holders. Majority of these stall holders (65%) paid rent ranging from PhP 100 to PhP 2,000 per month. Some stores (25%) paid rent ranging from PhP 2,001 to PhP 3,000.00 per month. Few stores (10%) paid rent above PhP 3,000.00 per month. The stalls are located inside as well as around the periphery of the wet markets, and they are usually organized into various sections, namely: rice and grain, dried fish, variety goods, fish, fruits and vegetables, eateries and groceries, dry goods, poultry, and meat.

Figure 4
Competitors of the wet market stores in Iloilo City



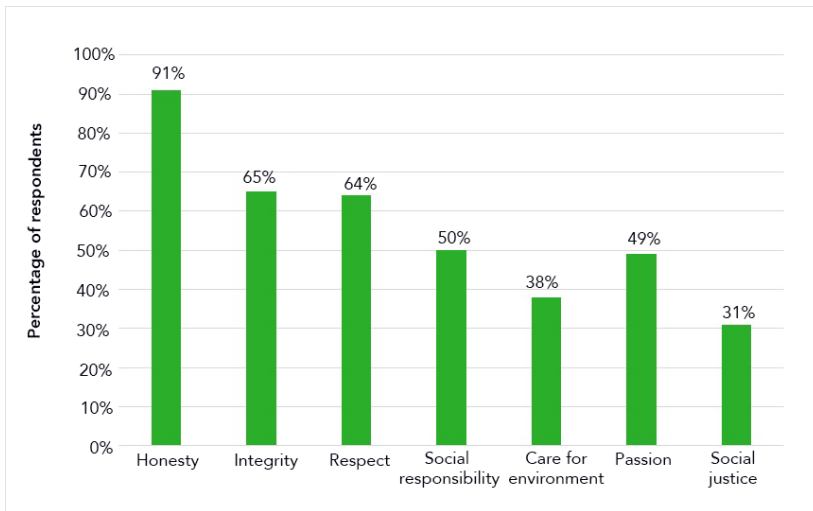
While taxes and fees are deemed as important economic factors, wet market operators identify business competitors as powerful economic forces that adversely affect their business operations.

Figure 4 presents the major competitors of wet market stores in Iloilo City. Majority (78%) identified the stores located within the market as their biggest competitors not only because they are closer geographically, but also because they can be primary drivers of how the business would operate. Other competitors included nearby supermarkets (34%) and convenience stores (24%).

Competitors such as adjacent supermarkets and newer forms of one-stop shopping establishments threaten the sustainability of wet market operations. Consumers are willing to sacrifice for the higher costs of products sold in supermarkets in exchange for the convenience as compared to buying in the wet market. Foreign-based markets provide a more comfortable customer experience not just in the purchase of weekly supply food but in everything a household needs (Trappey & Lai, 1997).

Social values. Figure 5 presents the social values essential in doing business, which were pointed out by the operators of wet market stores in Iloilo City. Majority mentioned honesty (91%), integrity (65%), and respect (64%). Other values they identified were social responsibility

Figure 5
Social values observed by wet market stores in Iloilo City

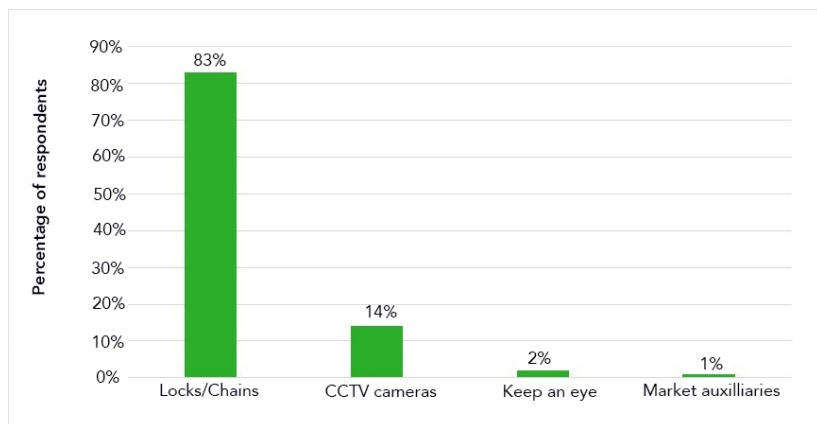


(50%), care for the environment (38%), passion (49%), and social justice (31%). Although these are good qualities that a vendor should possess, they did not believe that all of these qualities were essential in doing business. Moreover, they said that they did not practice social values when they saw that government officials are not practicing these. This indicates that leadership values as articulated in the character and work ethics of government officials influenced the values and professional conduct of their constituents such as those in the business sector.

Technological advancements. Majority of the wet market owners (82%) have yet to adopt to modern technology to assist them in their operations. Only quite a few of them (3%) were using technologies such as computers or cash registers. In fact, 15% of them said that they were not aware of such technologies.

Figure 6 presents the technology used as security measures by wet market stores in Iloilo City. To keep their businesses safe, majority of the stores (83%) used traditional security measures such as locks and chains to guard their stores, and only a few (14%) used CCTV cameras.

With technology and the digital age, the businesses owners' capability and adaptability to their changing environment could also be major factors that could affect their operations. However, most markets

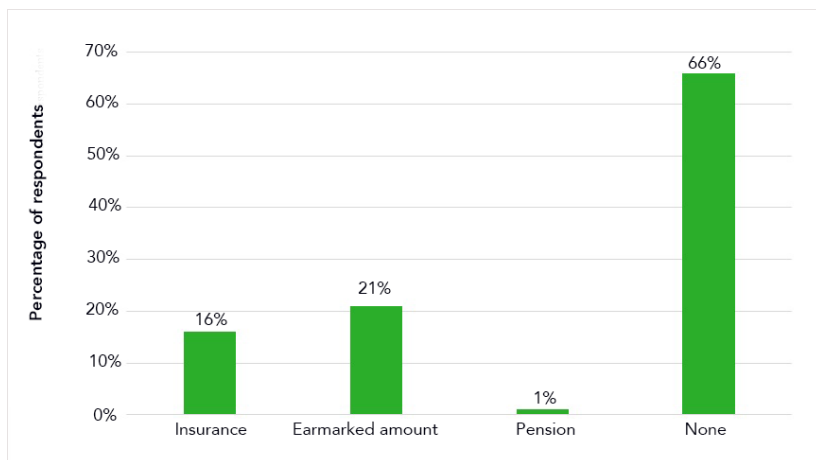
Figure 6**Security measures used by wet market stores in Iloilo City**

in Iloilo City have not yet fully adapted to automation. The lack of funds and knowledge in using these new technologies, and the desire for most vendors to stick to what they already know can explain why the wet market industry is still behind in terms of technological innovations.

Natural forces. The threat of unexpected natural or man-made calamities could adversely affect the business operations of stores in wet markets. For the past 10 years, no major natural calamities have affected the operations of the wet markets in Iloilo City. However, many instances of heavy rains have caused flooding in some of the stores, especially those located in the center of the market. There had been flooding even during light rainstorms because of the poor drainage system in these markets. Moreover, some portions of the Iloilo City Terminal Market were gutted by a big fire in the early 2000s, showing the need for the provision of safety measures in the wet markets.

Figure 7 shows the preventive measures used by the wet market stores in Iloilo City to safeguard their business from losses due to natural causes such as calamities and disasters. Majority of the stores (66%), however, did not even have any preventive measure to protect their business from losses. Only a few stores had insurance (16%) or an amount earmarked for any losses (21%). During these calamities, the wet market entrepreneurs helped each other in saving whatever they could in the commodities for sale in their stores.

Figure 7
Preventive measures used by wet market stores in Iloilo City



Resources of the Wet Markets

Location. Most of the stores are located in big markets like Iloilo Terminal Market (35%), Iloilo City Public Market (30%), and La Paz Public Market (20%). Other markets are relatively smaller like the wet markets in Arevalo (6%), Mandurriao (4%), Jaro (3%), and Molo (2%). Such findings might be due to the proportional allocation in identifying respondents for the study.

However, it has been observed that in the Philippines, wet markets are usually located near the *plazas*, which are full of people during the weekends and after mass schedules (Ong, 2012). Located at the town proper or *poblacion*, the *plazas* are the commercial hubs or districts especially in the old Philippine towns and cities with the presence of important community institutions such as the church, town hall, and school (Juanico, 2013). Such arrangements had their roots in the Spanish colonial times when Spanish friars facilitated the establishment of *pueblos* or towns across the country by firstly constructing the Catholic church and then the other major edifices around it (Jabines, n.d.). Wet markets today are still strategically located in the heart of the community making them accessible to all residents. While providing access to cheaper goods, wet markets also foster social relationships among community residents (Rancière, 2009).

As a tangible resource, strategic business locations such as those of the wet markets afford proximity to target customers and result in financial and economic benefits for the enterprises. Unlike intangible resources, e.g., patents, trademarks, and copyrights which do not have a physical form and do not contribute directly to business operations, tangible assets or resources are visible and measurable (Hitt et al., 2017). According to Hitt et al. (2017), tangible resources in combination with other resources of the business enterprises become sources of competitive advantage over similar businesses. Furthermore, a strategic geographic location is a valuable component in crafting a marketing strategy for the business and provides a competitive edge over rivals in the industry (Chan et al., 1995; Ghosh et al., 1995; Levy & Weiz, 1998). Competitive advantage consists of the rare, unique, and inimitable characteristics of a business that allows it a favorable position over similar businesses (David, 2011).

Capitalization. When asked regarding the optimal level of capitalization that they believe was required to start any kind of business in the wet market, some of entrepreneurs (34%) said that it was PhP 40,001 and above; some (28%) thought that it was between PhP 10,001 and PhP 25,000; and some observed it to be PhP 10,001 to PhP 25,000. They obviously made these assessments amidst current economic conditions with inflation and the increasing prices of goods and services.

As to the amount of start-up capital that the wet market owners used to start their businesses, majority of them (59%) started with only PhP 20,000 or below. Some (22%) started with PhP 20,001 to PhP 50,000. Only a few of them (17%) spent more than PhP 50,000 as their start-up capital.

Given their levels of capitalization, wet market enterprises can be considered as micro-enterprises. According to the Department of Trade and Industry (DTI) (2003), the Barangay Micro-Business Enterprise (BMBE) Law of 2002 defines BMBEs as business enterprises or entities engaged in the production, processing, or manufacturing of products or commodities, including agro-processing, trading and services, whose total assets including those arising from loans but exclusive of the land on which the particular business entity's office, plant and equipment are situated, shall not be more than PhP 3 million (DTI, 2003).

Sources of capitalization. On the sources of financing of the wet market stores in Iloilo City, almost all of the business owners (93%) started with their own personal capital. Some still relied on the “5-6”¹

¹ “5-6” is a lending scheme practiced by mostly Indian nationals who charge an interest of 20% per month

lending scheme of Indian nationals in the City (8%) and small-scale financing companies (3%). A few obtained their capital from banks (1%) and lending companies (1%).

Most of the businesses that have been in the wet markets for more than nine years started with their personal capital back then. This must have been the most convenient way of starting a business given the daunting interest rates and lending requirements of banks and other formal lending institutions for small borrowers like them. The influx of smaller lending companies and “5-6” lending schemes of informal money lenders occurred at a later time, so most of the families must have taken the risk of investing their own money in starting their businesses at the wet markets.

Technology. Almost all stores in the wet markets (94%) used the manual system of record keeping. Some stores (4%) had cash registers. Few stores (2%) had computers, and some (2%) did not even have record keeping procedures at all. Most businesses (49%) still used traditional weighing scales, while a few businesses were using freezers/refrigerators (25%) and electronic weighing scales (23%). Quite a number (27%) were not using any device in their daily operations.

Wet markets are usually developed later than business districts in terms of technology used. While some businesses use technology to assist them in their day-to-day operations and preserve the life of their products, many business owners do not have access to any technology due to the nature of the business or the cost of adapting to technology changes.

Enterprise Components

Business organization. More than half of business owners in wet markets in Iloilo City (56%) were sole proprietors in the retail or wholesale of goods and merchandise. Some of the respondents (32%) were engaged in a mix of retail and wholesale of goods. Others (11%) were in the sale of services like barber shops, *carinderias*, and tailoring shops, and only one was engaged in the manufacturing of goods. Majority of these businesses (94%) were registered with the Iloilo City government, and only very few (6%) have yet to be officially registered. This indicates that majority of the businesses had formal and legal personalities, and thus operate legitimate business enterprises.

In the case of the unregistered wet market stores, the BMBE Act of 2002 should encourage them to formally register their enterprises to avail of benefits afforded by government to registered businesses. The BMBE Act of 2002 extends assistance in the form of incentives and benefits to registered micro-businesses. One major benefit is the income tax exception for the registered BMBEs. The aim of the law is to incorporate the micro-enterprises to the mainstream economy since they contribute a lot to the country's economic growth. It also aims to strengthen the said sector, thus leading to job creation, generation of livelihood opportunities, and a better quality of life for the Filipinos (DTI, n.d.).

Financial literacy of the owner. Majority of the wet market entrepreneurs (44%) are college graduates. Some are high school graduates (30%) and college undergraduates (17%). A few business owners are high school undergraduates (6%) and elementary graduates (3%). This shows that majority of the business owners and operators in the wet markets of Iloilo City are equipped with the necessary education as an important advantage in managing their businesses efficiently and allows them to thrive in the industry with effective management practices and business operations.

Moreover, majority of the wet market entrepreneurs (83%) said that they have knowledge of basic concepts on business operations. In the many years that they have been conducting daily operations, they have developed their own systems and learned how to manage their own businesses with skills that may have been passed on from generations and learned from experience. Majority of them (59%) claimed that they have knowledge on basic accounting principles, which is essential in managing an enterprise, especially in assessing its profitability.

Accounting systems. Majority of the stores in wet markets in Iloilo City (56%) were using an accounting system in their day-to-day transactions. However, some (41%) did not use an accounting system, and a few (3%) were unaware of the need to use one. As for the accounting systems, majority of them (95%) did manual accounting. Some who did not use an accounting system explained that they did not believe this was necessary to run their business. Others pointed out that applying an accounting system was not feasible as they did not have funds to operate an accounting system, and they lacked knowledge on accounting systems.

Such findings imply that majority of the wet market enterprises were conscious of the need to operate a formal accounting system and to make an effort to use one for the business. On the other hand, those who

did not have accounting systems need to be trained, preferably in the use of a computerized accounting information system. Such a computerized system will formalize their financial record keeping as basis for business planning and performance assessment. An accounting system helps the business generate reports that are vital to their operations (Nkuah et al., 2015). The availability of accounting information systems in small businesses contributes to better business performance (Al Smirat, 2013); facilitates decisions on the value chain of a business organization (Khalid & Abdulqawi, 2015); and promotes effective decision-making in all levels of management (Hia & Teru, 2015).

Moreover, the presence of small and micro enterprises in developing countries without proper accounting systems hinders their governments in maximizing revenue generation from such enterprises. Tax assessment problems for these small and micro enterprises arise because of the lack of a proper set of accounting records that show the revenue realized and the expenses charged against these revenues (Nkuah et al., 2015).

In safeguarding the assets of the business, most of the stores (38%) usually secured their cash in a lock box. Storekeepers also made sure to keep an eye on their assets during operating hours. Owners of bigger businesses usually visited the stores often to get the *bental* profit either to deposit it in the bank or keep it at home. Others also used a rolling system wherein the cash they received during the day was immediately used to purchase new stocks.

As for transaction documentation, majority of the stores (78%) issued official receipts. The issuance of receipts is in compliance with the legal requirement imposed on all business enterprises by the Bureau of Internal Revenue (BIR). Data show that majority of the wet markets operated legally by complying with this particular requirement. Moreover, receipts allowed for proper documentation of sales and record keeping of all transactions and provided ease of operation as well as honesty and integrity in financial reports of business operations. For those who did not issue receipts, they either just provided a signed piece of paper, or did not issue anything at all. There was no receipt because haggling was common in wet markets where prices are not fixed and negotiated only verbally. Transactions were only done through cash; once the price had been decided and accepted, cash and goods were exchanged without the issuance of a receipt (Yan, 2013).

Majority of the stores (59%) kept accounting records, which were usually updated every day as each transaction occurred. However, almost half of them (41%) still did not regularly record their transactions.

To compute their earnings, most of them simply counted their cash and recorded the excess over the capital investment.

In preparing financial statements, only a few of the wet market enterprises (25%) were required to prepare and submit financial reports to proper authorities, while majority (70%) said otherwise. Stores required to submit reports usually had a bookkeeper and an accountant to prepare the reports. Some store owners said that they themselves prepared the reports for submission to the BIR.

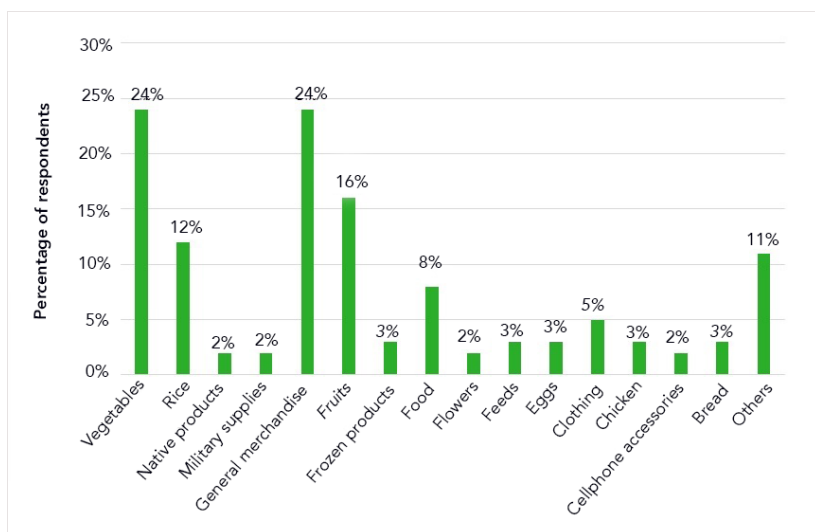
Similar to record keeping procedures, majority of the wet market enterprises (72%) did not have a bookkeeper employed to facilitate the accounting of their business. Some business owners (26%) employed bookkeepers, while others (2%) were not aware of the need for one. For the stores with bookkeepers, almost all of the owners paid the bookkeepers who visited the store to account for their monthly transactions. For stores that did not have a bookkeeper, records were usually kept by the owners themselves or by the salespersons in charge.

Overall, the data indicate that there were still many wet market owners in Iloilo City who were not very keen on proper record keeping and management of their finances. This is manifested by the lack of proper accounting procedures and formalities. Most of the stores, especially the smaller shops, did not even record every transaction exactly as they occurred. More often than not, only stores registered with the BIR and those required to submit financial reports to the local government or other government authorities followed proper protocols in formally recording their transactions.

Furthermore, most of the stores that used accounting systems, issued receipts, regularly documented their transactions, employed personnel to manage their finances, and followed more formalities in doing their business were those that had fixed stalls located outside the marketplace rather than those from within the marketplace.

Business Outputs of the Wet Markets

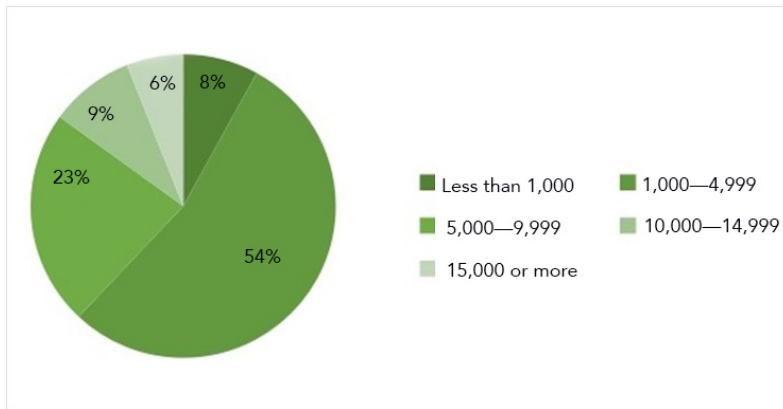
Products and services. Figure 8 presents the products and services available in the wet markets in Iloilo City. Findings show that most businesses in the wet markets were engaged in the selling of vegetables (24%) and general merchandise (24%) followed by the sale of fruits (16%). The diversity of product offerings in Iloilo City wet markets fits Yan's (2013) description of the typical wet market scene where distinctions and divisions are made between "wet" and "dry" items.

Figure 8**Products and services available in wet markets in Iloilo City**

Wet items include fresh produce such as fruits and vegetables, fish, and meat, while “dry” products include rice, dried noodles, and dried seafood. Moreover, the Iloilo City wet markets affirmed Yan’s (2013) observations that demand and supply were major drivers of costs for wet markets; changes in economic conditions may affect the prices of goods in the market; weather conditions affect the supply of products especially vegetables; and seasonal variations for festivities also affect the prices of goods. Moreover, wet market business starts as early as 3:00 or 4:00 a.m. when fresh produce from the suppliers are delivered in bulk (Ong, 2012).

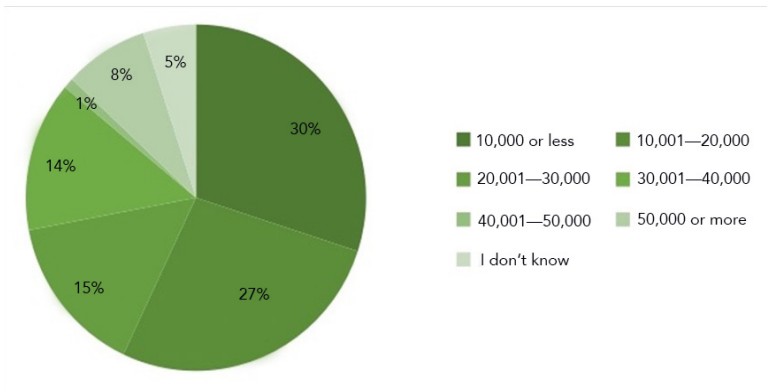
Average daily revenues. Figure 9 shows the average daily revenues of stores in wet markets in Iloilo City. Data indicate that majority of the respondents (54%) earned daily revenues amounting to PhP 1,000 to PhP 4,999. Some stores (9%) earned as much as PhP 10,000 to PhP 14,999. Other stores (23%) earned from PhP 5,000 to PhP 9,999, while a few stores (6%) earned below PhP 1,000 daily.

These results imply that wet market businesses have the potential to be generative sources of much needed revenues for the City government. Micro businesses such as the wet market stall holders are vital to the development of the Philippine economy as they provide opportunities for gainful employment and potential wealth generation. They are also the stepping stones in the development of the Filipino entrepreneurial talent.

Figure 9**Average daily revenues of stores in wet markets in Iloilo City**

Average monthly income. Figure 10 presents the average monthly income of stores in wet markets in Iloilo City. Data indicate that most businesses (30%) earned an average of PhP 10,000 or less; some (27%) earned PhP 10,001 to PhP 20,000; others (15%) earned PhP 20,001 to PhP 30,000; and some (28%) earned more than PhP 30,000.

The average monthly income may be estimated according to the size of the store and the location where foot traffic is appropriately considered. This may also be due to certain inefficiencies in operations or to the turnover of goods and services offered in the wet markets. However, regardless of the income earned, wet markets like any business enterprise possess potentials for business growth. They also provide opportunities for building managerial capacity for a more proactive and strategic approach to business operations.

Figure 10**Average monthly income of stores in wet markets in Iloilo City**

Governance Initiatives for Wet Market Development

In the exercise of its corporate powers, local government units (LGUs) are allowed to operate local economic enterprises (LEEs) such as public markets and slaughterhouses [RA 7160 Section 17(b)(2)(ix)]. LEEs can promote people participation in local development, generate income to augment local revenues, facilitate wider access to goods and services at affordable prices to a larger portion of the LGU population, and draw potential investors with key services not rendered by the private sector (Department of Budget and Management [DBM], 2016). Under the DBM guidelines on the setting-up and operation of LEEs, the LGU can put up a local economic enterprise unit or office to supervise the operations and management of the LEEs within its jurisdiction. Operation of the LEEO shall be charged against income derived from taxes and fees imposed on LEEs.

According to the LEEO officials of the Iloilo City government, the existing workforce in the public wet markets are composed of the following: a market manager for each of the public wet markets to oversee market operations; market enforcers, and guards to supplement the City's police force in maintaining peace and order in the markets; and accountable officers who collect the daily entrance fees from the wet market entrepreneurs. Moreover, initiatives of the LEEO in the management and development of wet markets in Iloilo City include the following:

- 1) Review of existing market taxes, fees, and charges. There is the need to increase current rates of the monthly market rental fees, annual registration fees or business permits, daily entrance fees, and other necessary fees from stall holders and transients (i.e., vendors who do not occupy market stalls and sell their goods using only a table provided by the City government). Such rates were established way back 2009, while delinquency fees were set last 2015, hence these should be reviewed and updated. The new rates would help increase the City government's revenue collections from market operations.
- 2) Inventory of market stalls and stall holders for adjudication. The City government provides the stalls for the stall holders, fish tables specifically for fish sellers, and tables for other vendors. A complete inventory of market stalls and stall holders can determine the rightful owners and prevent legitimate stall holders from leasing their stalls to other individuals. Moreover, the inventory would resolve problems with illegal extensions and obstructions created by some stall holders and transients.

- 3) Implementation of wet market infrastructure development projects. Infrastructure improvement projects that were delayed due to the Covid-19 pandemic will be implemented by 2022. These include the repair and improvement of the wet market buildings of the Jaro Big Market and markets in the districts of Arevalo, La Paz, and Mandurriao. Business cases or feasibility studies are being prepared for building renovations in the Iloilo Terminal Market and Iloilo Central Market under the public-private partnership program of the City government. Other plans include installation of CCTV cameras in all of the wet markets in the City.
- 4) Extension of business support and development assistance to wet market enterprises. Besides the collection of market fees and taxes, the LEEO conducts regular food safety trainings for meat and poultry sellers in coordination with the National Meat Inspection Service. It also implements sanitation protocols in the wet markets with the weekly declogging of the drainage systems, disinfection twice a week, and weekly flushing with the assistance of the Bureau of Fire Protection. Moreover, the LEEO facilitated the financial assistance for wet market businesses to help ease their financial difficulties due to the pandemic. Such assistance was coordinated with the Department of Social Welfare and Development. The officer of LEEO said that wet market operators can always request for business assistance from the LEEO through their market vendors' associations. These requests will be addressed in coordination with the appropriate government agencies, civil society organizations, or private sector entities.

CONCLUSION AND RECOMMENDATIONS

Wet market operations are affected by the external environmental forces that are considered to be drivers of the way the wet market entrepreneurs conduct their business operations. Most of the establishments in the wet markets are currently registered with the government as sole proprietorships. Majority of them claimed that the amount of capitalization needed to start a business was at least PhP 20,000.00. In terms of technical knowledge and application, most of the entrepreneurs had knowledge of basic business operations and accounting acquired from years of doing business. Being small and traditional in nature, almost all the businesses recorded their transactions

manually and only a few used computers for record keeping. On the part of the City government, local governance initiatives to improve the business operations of the wet market included updating of market taxes and fees, inventory of stalls and stall holders, and improvement of infrastructure facilities.

Findings provide implications on City government efforts in the promotion and development of wet market enterprises. Since the LEEO is amenable to assisting wet markets through their associations, there is a need to strengthen market vendors' associations so that they can be effective channels of business services for their members. Moreover, these district-level associations can be encouraged to put up their apex organization to be accredited by the City government and if possible, allowed representation in the City legislative council. As such, local ordinances and policies can strategically address issues and concerns of the wet market enterprises, assist their growth and viability as business organizations, and enable them to contribute significantly to local economic development.

The study also recommends in-depth studies on financial management practices of wet market stores vis-a-vis government revenue generation efforts, value chain activities of the wet market stall holders, and management of public wet markets as public spaces. Results of these studies can provide empirical data to support local economic promotions targeting improvements in wet market conditions and business performance.

REFERENCES

- Al Smirat, B. Y. (2013). The use of accounting information by small and medium enterprises in South District of Jordan (An empirical study). *Research Journal of Finance and Accounting*, 4(6), 169–175. <https://core.ac.uk/download/pdf/234629511.pdf>
- Bangko Sentral ng Pilipinas. (n.d.). *Coins and notes: History of Philippine money*. <https://www.bsp.gov.ph/Pages/CoinsAndNotes/HistoryOfPhilippineMoney/HistoryOfPhilippineMoney.aspx>
- Black, R. E. (2012). *Porta Palazzo: The anthropology of an Italian market*. University of Pennsylvania Press. <https://www.jstor.org/stable/j.ctt3fhzsr>
- Black, R. E. (2005). The Porta Palazzo farmers' market: Local food, regulations and changing traditions. *Anthropology of Food*, 4. <https://doi.org/10.4000/aof.157>

-
- Bougoure, U., & Lee, B. (2009). Service quality in HongKong: Wet markets vs supermarkets. *British Food Journal*, 111(1), 70 –79. <https://doi.org/10.1108/00070700910924245>
- Business Mirror. (2015, July 19). *Do you still shop in a 'palengke'? 7 of 10 Pinoys don't*. <https://businessmirror.com.ph/2015/07/19/do-you-still-shop-in-a-palengke-7-of-10-pinoys-dont/>
- Chan, S. H., Gau, G. W., & Wang, K. (1995). Stock market reaction to capital investment decisions: Evidence from business relocations. *Journal of Financial and Qualitative Analysis*, 30(1), 81–100. <https://www.jstor.org/stable/2331254>
- Cummings, T. G., & Worley, C. G. (2014). *Organization development and change* (10th ed.). Cengage Learning
- David, F. R. (2011). *Strategic management: Concepts and cases*. Prentice Hall.
- Department of Budget and Management. (2016). *Manual on the setting-up and operation of local economic enterprises*. <https://www.dbm.gov.ph/wp-content/uploads/Issuances/2016/Local%20Budget%20Circular/LBC-111-MANUAL%20ON%20THE%20SETTING%20UP%20AND%20OPERATION%20OF%20LOCAL%20ECONOMIC%20ENTERPRISES.pdf>
- Department of Trade and Industry. (2003). *SME development plan (2004-2010)*. https://www1.dti.gov.ph/sdm_downloads/sme-development-plan-2004-2010/
- Department of Trade and Industry. (n.d.). *BMBE renewal, anytime, anywhere*. <https://bmbe.dti.gov.ph/index/>
- Dholakia, N., Dholakia, R. R., & Chattopadhyay, A. (2012). India's emerging retail systems: Coexistence of tradition and modernity. *Journal of Macromarketing*, 32(3), 252–265. <https://doi.org/10.1177/0276146712438900>
- Ghosh, C., Rodriguez, M., & Sirmans, C. F. (1995). Gains from corporate headquarters relocations: Evidence from the stock market. *Journal of Urban Economics*, 38(3), 291–311. <https://doi.org/10.1006/juec.1995.1034>
- Goldman, A., Krider, R., & Ramaswami, S. (1999). The persistent competitive advantage of traditional food retailers in Asia: Wet markets' continued dominance in Hong Kong. *Journal of Macromarketing*, 19(2), 126–139. <https://doi.org/10.1177/0276146799192004>
- Gorton, M., Sauer, J., & Supatpungkol, P. (2009, March 30–April 1). *Investigating Thai shopping behavior: Wet-markets, supermarkets and food quality* [Conference presentation]. 83rd Annual Conference, Dublin, Ireland. <https://doi.org/10.22004/ag.econ.51054>

-
- Guan, Y., Zheng, B. J., He, Y. Q., Liu, X. L., Zhuang, Z. X., Cheung, C. L., Luo, S. W., Li, P. H., Zhang, L. J., Guan, Y. J., Butt, K. M., Wong, K. L., Chan, K. W., Lim, W., Shortridge, K. F., Yuen, K. Y., Peiris, J. S., & Poon, L. L. (2003). Isolation and characterization of viruses related to the SARS coronavirus from animals in southern China. *Science*, 302(5643), 276–278. <https://doi.org/10.1126/science.1087139>
- Gutierrez, B. P. B., & Jegasothy, K. (2010). Identifying shopping problems and improving retail patronage among urban Filipino customers. *Philippine Management Review*, 17, 66–79. <https://pmr.upd.edu.ph/index.php/pmr/article/download/173/172>
- Hia, D., & Y Teru, S. (2015). Efficiency of accounting information system and performance measures—Literature review. *International Journal of Multidisciplinary and Current Research*, 3(Sept-Oct), 976–984. <http://ijmcr.com/wp-content/uploads/2015/09/Paper11976-984.pdf>
- Hitt, M. A., Ireland, R. D., & Hoskisson, R. E. (2017). *Strategic management: Competitiveness and globalization concepts* [12th ed]. Cengage Learning. <https://bawar.net/data0/books/5ea6b715e53cf/pdf/strategic.pdf>
- Hingley, M., Lindgreen, A., & Chen, L. (2009). Development of the grocery retail market in China: A qualitative study of how foreign and domestic retailers seek to increase market share. *British Food Journal*, 3(1), 44–55. <https://doi.org/10.1108/00070700910924227>
- Huang, C-t., Tsai, K-H., & Chen, Y-C. (2015). How do wet markets still survive in Taiwan? *British Food Journal*, 117(1), 234–256. <https://doi.org/10.1108/BFJ-05-2013-0136>
- Jabines, M. C. G. (n.d.). *The history of Maribojoc: Digging the foundations of a town*. <http://www.maribojoc.gov.ph/about/history>
- Juanico, M. B. (2013). The Philippine plaza complex: Reconciling conservation of historical and heritage structures and sites with demands of urban growth. *The Journal of History*, 59(1). <https://ejournals.ph/article.php?id=5425>
- Kast, F. E., & Rosenzweig, J. E. (1972). General system theory: Applications for organization and management. *The Academy of Management Journal*, 15(4), 447–465. <https://www.eajournals.org/journals/european-journal-of-accounting-auditing-and-finance-research-ejaafr/vol-3issue-6-june-2015/the-effect-of-using-accounting-information-systems-to-improve-the-value-chain-in-business-organizations-empirical-study/>

-
- Khalid, M., & Abdulqawi, A. (2015). Effect of using accounting information systems to improve the value chain in business organisations – Empirical study. *European Journal of Accounting, Auditing and Finance Research*, 3(6), 1–11. <http://www.eajournals.org/wp-content/uploads/The-Effect-of-Using-Accounting-Information-Systems-to-Improve-the-Value-Chain-in-Business-Organizations-Empirical-Study.pdf>
- Levy, M., & Weitz, B. A. (1998). *Retailing management*. Irwin/McGraw-Hill.
- Marinelli, M. (2018). From street hawkers to public markets: Modernity and sanitization made in Hong Kong. In Y. Cabannes, M. Douglass, & R. Padawangi (Eds.), *Cities in Asia by and for the people* (pp. 229–258). Amsterdam University Press. <https://doi.org/10.2307/j.ctv7xbs0b.12>
- Meadows, D. H. (2009). *Thinking in systems*. Earthscan.
- Mele, C., Ng, M., & Chim, M. B. (2015). Urban markets as a ‘corrective’ to advanced urbanism: The social space of wet markets in contemporary Singapore. *Urban Studies*, 52(1), 103–120. <http://www.jstor.org/stable/24855555>
- Nkuah, J. K., Frederick, A. K., & Asamuah, K. (2015). The correlation between accounting systems of small and micro enterprises and tax revenue assessment in Ghana. *Journal of Education and e-Learning Research*, 2(1), 1–12. <https://eric.ed.gov/?id=EJ1148728>
- Office of Sangguniang Panlungsod-Iloilo City. (2008). *Tax Ordinance No. 2008-021: An ordinance amending sections 4(a), 4(d), 28(d), 28(e), 28(f), 28(n) 43, 136(h), and 22 of tax ordinance No. 2007-016 otherwise known as “The Revised Local Revenue Code of City of Iloilo.”*
- Ong, J. (2012). *The Philippine wet market: Allure beyond mud and personal space*. <https://flyinglemons.wordpress.com>
- Rancière, J. (2009). *The politics of aesthetics: The distribution of the sensible*. Continuum International Publishing Group.
- Reardon, T., Timmer, C. P., & Minten, B. (2012). Supermarket revolution in Asia and emerging development strategies to include small farmers. *Proceedings of the National Academy of Sciences of the United States of America*, 109(31), 12332–12337, <https://doi.org/10.1073/pnas.1003160108>
- Official Gazette. (1991, October 10). *Republic Act No. 7160: An act providing for a local government code of 1991*. <https://www.officialgazette.gov.ph/1991/10/10/republic-act-no-7160/>
- Romo, G. D., Digal, L., & Reardon, T. (2009). The transformation of food retail in the Philippines. *Asian Journal of Agriculture and Development*, 6(2), 51–84. <https://doi.org/10.22004/ag.econ.199076>
- Royal Spanish Academy. (2001). *Dictionary of the Spanish language*.

- Schipmann, C. & Qaim, M. (2011). *Modern food retailers and traditional markets in developing countries: Comparing quality, prices, and competition strategies in Thailand*. Global Food Discussion Papers, No. 2, Georg-August-Universität Göttingen, Research Training Group (RTG) 1666 - GlobalFood, Göttingen. <https://doi.org/10.22004/ag.econ.108348>
- Sharif, M. S. M., Nor, N. M., Zahari, M. S. M., & Muhammad, R. (2015). Following mothers to the markets: The significant benefits gain by young generations. *Procedia - Social and Behavioral Sciences*, 170, 197–205. <https://doi.org/10.1016/j.sbspro.2015.01.029>
- Shepherd, R. J. (2008). When culture goes to market: Space, place, and identity in an urban marketplace. Peter Lang, Inc. <https://doi.org/10.3726/978-1-4539-0759-7>
- Stillerman, J. (2006). Private, parochial, and public realms in Santiago, Chile's retail sector. *City and Community*, 5(3). 293–317. <https://doi.org/10.1111/j.1540-6040.2006.00182.x>
- Stoner, J. A. F., Freeman, R. E., & Gilbert, Jr., D. R. (1999). *Management* (6th ed.). Prentice Hall.
- Trappey, C., & Lai, M. K. (1997). Differences in factors attracting consumers to Taiwan's supermarkets and traditional wet markets. *Journal of Family and Economic Issues*, 18, 211–224. <https://doi.org/10.1023/A:1024980425100>
- Webster, R. G. (2004). Wet markets—A continuing source of severe acute respiratory syndrome and influenza? *The Lancet*, 363(9404), 234–236. [https://doi.org/10.1016/S0140-6736\(03\)15329-9](https://doi.org/10.1016/S0140-6736(03)15329-9)
- Wilson, J. (1983). *Social theory*. Prentice Hall.
- Yan, Y. (2013). *Community heritage series II: Wet markets*. National Heritage Board. https://www.nhb.gov.sg/~media/nhb/files/resources/publications/ebooks/nhb_ebook_wet_markets.pdf
- Zhang, Q. F., & Pan, Z. (2013). The transformation of urban vegetable retail in China: Wet markets, supermarkets and informal markets in Shanghai. *Journal of Contemporary Asia*, 43(3), 497–518. <https://doi.org/10.1080/00472336.2013.782224>
- Zhenzhong, S., Scott, S., & C. McCordic. (2019). Wet markets, supermarkets and alternative food sources: Consumers' food access in Nanjing, China. *Canadian Journal of Development Studies/Revue canadienne d'études du développement*, 40(1), 78–96. <https://doi.org/10.1080/02255189.2018.1442322>
- Zhong, S., Crang, M., & Zeng, G. (2020). Constructing freshness: The vitality of wet markets in urban China. *Agriculture and Human Values*, 37, 175–185. <https://doi.org/10.1007/s10460-019-09987-2>